

REMARKS

Receipt of the Office Action of December 23, 2003 is gratefully acknowledged.

Claims 7 - 12 are pending. These have been further examined in this RCE application and rejected as follows: (1) claims 7 and 10 as unpatentable under 35 USC 103(a) over Thomin et al in view of Boedecker et al; (2) claims 7 and 10 as unpatentable under 35 USC 103(a) over Hope et al in view of Boedecker et al; and claims 8, 9, 11 and 12 as unpatentable under 35 USC 103(a) over Hope et al in view of Boedecker et al and Eickmann.

These rejections are respectfully traversed.

These rejections were previously discussed in the RESPONSE filed on October 9, 2003. It was noted that these references do not teach bellows with ridge-like folds. See Figs. 5A-5C. It was further noted that in a state wherein the bellows contracts, the upper lamella portion of each ridge-like fold is inclined at the same angle as is the lower lamella portion. So, in the contracting state, the angle of downward inclination of the lower lamella portion never becomes gentle. It is always maintained at a predetermined angle of inclination. Also, even when the bellows extends, the lower lamella portion can possibly be inclined at an acute angle, but never at a gentle angle. As a result, the efficiency of discharging slurry is high. In other words, the lower lamella portion is always downwardly inclined toward the axis, so that even when using a liquid containing a sediment material such as a slurry, the bellows can prevent the liquid from stagnating in the recess portion of the bellows when the pump stops.

When the bellows extends, the upper lamella portion is variable from a downward inclination state to an upward inclination state. As the amount of the variation increases, the elasticity of the upper lamella portion can increase. With the aid of this elasticity, contraction of

the bellows can be positively helped. In other words, contraction of the bellows can occur at higher pressure (or speed) than the bellows whose edge section is formed in the shape of "<." This result more effectively discharges the liquid containing slurry, which remains in the recess portion of the bellows, to the outside recess portion, and can increase pump pressure, i.e., the pressure for discharging the liquid containing the slurry, and this applies even to liquid containing slurry whose specific gravity is high. It too can be efficiently discharged. As a result, even a compact pump can provide higher discharge power, which in the semiconductor field, is preferable.

None of these advantages can, it is respectfully submitted, be achieved with the designs of the art of record.

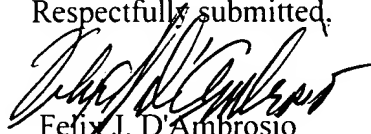
In reply, the examiner has stated "....it is noted that the features upon which applicant relies (i.e., that the lower lamella portion is not at a 'gentle' angle when the bellows are extended and that the upper lamella portion of each ridge-like fold is inclined at the same angle and the lower lamella portion) are not recited in the rejected claim(s)."

To expedite matters, applicant telephoned the examiner to discussed independent claims 7 and 10 and specifically a further amendment to these claims which should distinguish the invention over the art of record.. Specifically, both claims were further amended, as noted above, to recite that the bellows have a vertical extent in the ridge-like and valley-like portions. To illustrate this feature Fig 5B was annotated to show the vertical extent. The vertical extent is easily seen in annotated Fig. 5B. Clearly, none of the references show such a vertical extent. A copy of the annotated version of Fig. 5B is attached hereto. A commitment from the examiner was not given to this amendment to claims 7 and 10.

The examiner is urged to reconsider this application and claims 7 - 12 and, in view of the further amendment to claims 7 and 10, to allow them and dependent claims 8, 9 , 11 and 12 as well.

If any questions remain outstanding, the examiner is urged to contact the undersigned to arrange for an interview.

Respectfully submitted,



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Fig. 5A

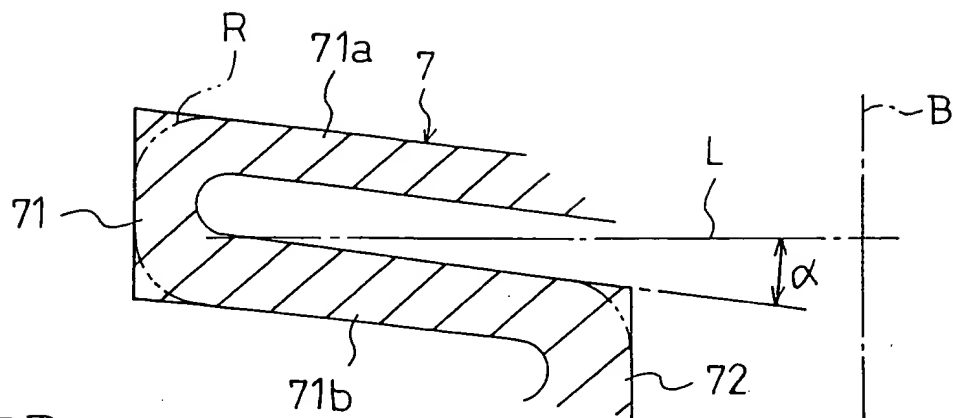


Fig. 5B

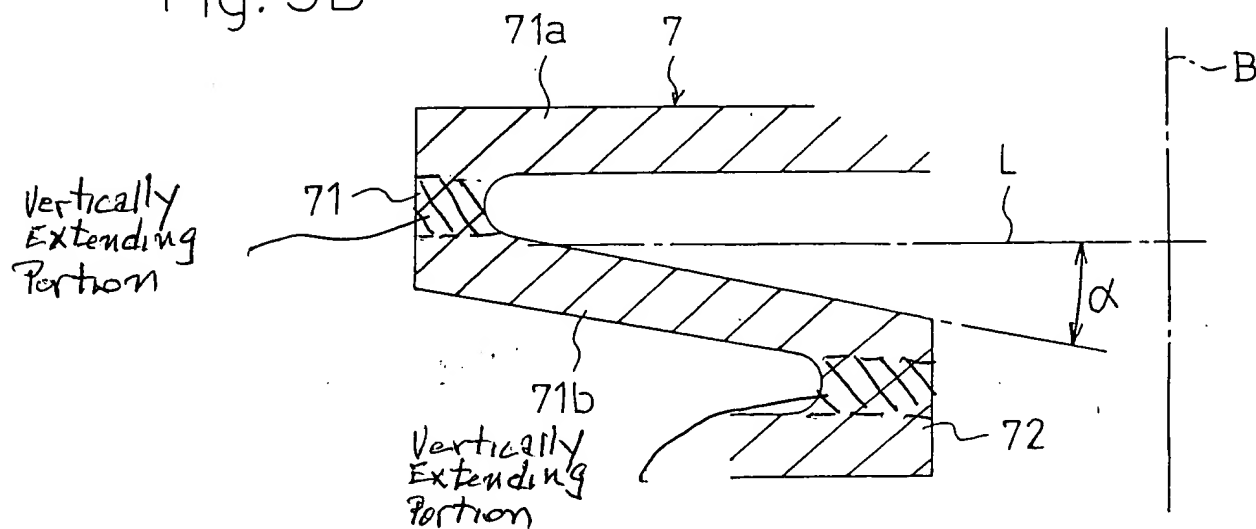


Fig. 5C

